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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/781,485

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Chuan-Chu Chen

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EXAMINER

LIE, ANGELA M

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/781,485

Applicant(s)

CHEN, CHUAN-CHU

Examiner

Angela M. Lie

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-19 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


TAN HO
PRIMARY EXAMINER

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 7-9, 12, 14-15, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by McNamara, Jr (US 4047076).

As to claims 7 and 14, McNamara discloses an electronic device having an illumination circuit (Figure 11) comprising: a first load (Figure 11, element 34) wherein current flowing on the first load is reduced as time increases (wherein the circuit shown in figure 11 is capable of performing this function); an AC driving unit for generating an AC current (Figure 11, element AC source) to drive the first load (34); a current transformer having a primary winding (Figure 11, left side of the element 30) and a secondary winding (Figure 11, right side of the element 30), wherein the primary winding is coupled between the first load (34) and the AC driving unit (AC source), such that the secondary generates induced current (the function of the transformer); a second load having an illumination function (Figure 11, element 32), wherein the brightness of the second load is changed according to an AC driving voltage and wherein the brightness of the second load corresponds to an operating duration of the first load (it is an inherent feature that the brightness of the lamp varies based on the

supplied voltage, a good example of this is dimmer circuit for the lamp wherein the supply voltage is changed in order for the lamp to result in specific brightness.

Furthermore operating duration of the first load (34) is considered to go on as long there is current flowing through this load, therefore the brightness of the second load indeed depends on an operating duration of the first load; and a transformation device (Figure 11, element 70), connected with the secondary winding (Figure 11, right part of the element 30) and the second load (Figure 11, element 32) in parallel, for transforming the induced current to the AC driving voltage to drive the second load (since in the second winding AC current is induced, the resistor (24) will naturally transform current into AC voltage).

As to claim 9, McNamara discloses the electronic device, wherein the transformation device comprises an impedance (Figure 11, element 70).

As to claim 12 and 17, McNamara discloses the electronic device wherein the first load is an AC lamp (Figure 11, element 34).

As to claim 15, McNamara discloses the electronic device (Figure 11) capable of the function wherein a current flowing on the first load becomes smaller and brightness of the second load is reduced over time (wherein it is inherent that once driving current becomes smaller brightness will all decrease, i.e. basic laws of physics).

As to claims 8 and 19, McNamara inherently discloses the electronic device wherein a coil number of the primary winding is smaller than a coil number of the secondary winding (column 5, lines 20-30; wherein step up transformer is equivalent

with saying that the first winding has less turns than the second winding, see definition of step up transformer in supplied reference, page 2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11,13,16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over McNamara, Jr (US 4047076) in the view of Konodo et al (US Publication 20030025659).

As to claims 13 and 18, McNamara teaches all the limitations disclosed in claims 7 and 14 respectively, however he does not teach that the second load is an electroluminescent lamp. Konodo teaches driving circuitry comprising transformer wherein the second winding of this transformer is connected to the electroluminescent element (Figure 3, element 30). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to use electroluminescent light as a second load in McNamara circuit, because electroluminescent light has many advantages over fluorescent lamps, for instance electroluminescent lamps are low weight, very thin, they have uniform illumination, design flexibility, different colors available and low power consumption (<http://www.asm->

circuits.com/electronic_circuit_products/electroluminescent_lamps_manufactures_india.html).

As to claims 11 and 16, McNamara does not explicitly state that his circuit is used in a video projector, however Konodo teaches light driving circuit for driving an EL light, wherein the circuit comprises a step-up transformer (Figure 3, element 31) and wherein this driving circuit is used in the image projector (paragraph 6). It would have been obvious to one of the ordinary skill in the art during the time the invention was made, to use circuit as taught by McNamara in the video projector because a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over McNamara, Jr (US 4047076) in the view of Ishimura et al (US Patent 4992922). McNamara teaches the circuit as disclosed in claim 9, however he does not teach the transformation device further comprising a low-pass filter. Ishimura teaches a high-voltage generating circuit comprising a transformer (Figure 2, element 9) and a low pass filter (Figure 2, element 5) connected to the second winding of this transformer (9). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to connect the low-pass filter to the second winding of transformer as taught by Ishimura in McNamara's circuitry, because low-pass filter removes the ripple components of the output of the preceding device (column 1, lines 63-64), so that

light emitted by the lighting element can be constant and without any disturbances. Furthermore protecting light element from sudden ripples in the supplied voltage, also can improve the lifetime of the light element.

Allowable Subject Matter

6. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to teach an electronic circuit as disclosed in claim 10, wherein the impedance and the low-pass filter are connected with the secondary winding and second load in parallel.

Response to Arguments

8. Applicant's arguments filed on December 7, 2005 with respect to the rejection of claims 7 and 14 have been fully considered but they are not persuasive.

With respect to the applicant's assertion on page 6, first paragraph stating that the element 70 taught by McNamara, is not directly connected with the right part of the element 30 and 32 in parallel and therefore this prior art does not read on all the limitations disclosed in claims 7 and 14, the examiner disagrees with this statement.

According to the Figure 11, element 70 is indeed connected to the right winding of the transformer and light emitting element in parallel.

9. Applicant's arguments, see pages 7-9, filed on December 7, 2005, with respect to the rejection(s) of claims 8,10,11,13,16,18 and 19 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of Kondo et al (US Publication 20030025659) and Ishimura et al (US Patent 4992922).

The Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US 20040113566 discloses a circuitry for sensing voltage for fluorescent lamp comprising: a first load, a transformer, a frequency filter and an illumination device as a second load.
- US 4099095 discloses an operating circuit for gaseous discharge and incandescent lamps comprising first and second load, transforming device, transformer.
- US 4017761 discloses an electric device for starting and supplying a discharge lamp comprising: transformer, first load, second load.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela M. Lie whose telephone number is 571-272-8445. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Angela M Lie


TAN HO
PRIMARY EXAMINER